

**Liu, Chien-Ying's**

**Principle Investigator of Research Grants**

1. Sep 01, 1997 ~ Aug 31, 1998  
**The expression of nitric oxide synthase in primary lung cancer and its relation to the prognosis**  
Granted by Chang-Gung Memorial Hospital  
CMRP 739
2. Aug 01, 2001 ~ Sep 30, 2002  
**The role of caspase-dependent and –independent mechanisms in TNF-induced neutrophil apoptosis**  
Granted by National Science Council  
NMRPG0071, NSC 90-2314-B-182A-074
3. May 01, 2002 ~ April 30, 2003  
**The molecular mechanisms of A1, a Bcl-2 homologue, in apoptotic process, cell cycle control and inflammatory responses- explored by a gene-targeting approach**  
Granted by Chang-Gung Memorial Hospital  
CMRP 1323
4. August 01, 2002 ~ July 31, 2003 (1/2)  
**The effect of Bcl-2 related protein A1 in preventing ischemia-reperfusion lung injury-approached by in vivo gene transfer**  
Granted by National Science Council  
NMRPG1097, NSC 91-2314-B-182A-060 (1/2)
5. June 01, 2003 ~ May 31, 2004  
**Immunobiological responses of monocytes and T-lymphocytes in patients with SARS**  
Granted by Chang-Gung Memorial Hospital  
CMRPG32016S
6. August 01, 2003 ~ July 31, 2004 (2/2)  
**The effect of Bcl-2 related protein A1 in preventing ischemia-reperfusion lung injury-approached by in vivo gene transfer**  
Granted by National Science Council  
NMRPG2090, NSC 92-2314-B-182A-109 (2/2)
7. January 01, 2004 ~ December 31, 2004 (Co-PI)  
**The damaging effect of apoptotic neutrophils on human lung epithelial cells**  
Granted by Chang-Gung Memorial Hospital

CMRPG32113 (PI: Dr. Yu-Hen Liu, Department of Thoracic Surgery, Chang-Gung Memorial Hospital)

8. August 01, 2004 ~ July 31, 2005

**The apoptotic mechanisms in the TNF  $\alpha$ -stimulated human neutrophils and HL60-derived neutrophil-like cells**

Granted by National Science Council

NMRPG3138, NSC93-2314-B-182A-137

9. August 01, 2004 ~ October 31, 2005 (Co-PI)

**The modulation of G-protein complex stimulator on the proliferation of the human airway smooth muscle**

Granted by National Science Council

NMRPG, NSC 93-2314-B-182A-067- (PI: Dr. Chien-Da Huang, Department of Thoracic Medicine, Chang-Gung Memorial Hospital)

10. August 01, 2004 ~ July 31, 2005 (Co-PI)

**The study on interstitial pneumonitis: the epidemics, clinical, virological and immunological study**

Granted by National Science Council

NMRPG340311, NSC 94-2314-B-182A-190- (PI: Dr. Han-Pin Kuo)

11. August 01, 2004 ~ July 31, 2005 (Co-PI)

**The mechanism of phagocytic recognition/clearance in apoptotic and senescent non-apoptotic human neutrophils and promyelocytic HL60 cells**

Granted by National Science Council

NSC93-2314-B-038-020- (PI: Ling-Ling Chiang, Taipei Medical University, Department of Respiratory Therapy)

12. August 01, 2005 ~ July 31, 2006 (1/2)

**The mechanisms of neutrophil-derived  $\alpha$ -defensin-1 in inducing lung epithelial cell apoptosis and MCP-1 secretion as well as the interactions in-between**

Granted by National Science Council

NMRPG340311, NSC94-2314-B-182A-190

13. February 01, 2006 ~ January 31, 2007

**DNA polymorphisms and changes of epidermal growth factor receptor mutations relate to variations in EGFR-related signaling and response to EGFR inhibitors in patients with advanced non-small cell lung cancer**

Granted by Chang-Gung Memorial Hospital

CMRPG350121

14. August 01, 2006 ~ July 31, 2007 (2/2)  
**The mechanisms of neutrophil-derived  $\alpha$ -defensin-1 in inducing lung epithelial cell apoptosis and MCP-1 secretion as well as the interactions in-between**  
Granted by National Science Council  
NMRPG340312, NSC 95-2314-B-182A-018
15. August 01, 2008 ~ July 31, 2009 (1/2)  
**The growth of CD11b<sup>+</sup>/CD14<sup>-</sup>/CD33<sup>+</sup> myeloid-derived suppressor cells and their modulatory activity on the CD8<sup>+</sup> cytotoxic lymphocytes and monocytes in human lung cancer**  
Granted by National Science Council  
NMRPG 376371, NSC 97-2314-B-182A-091-MY2
16. August 01, 2009 ~ July 31, 2010 (2/2)  
**The growth of CD11b<sup>+</sup>/CD14<sup>-</sup>/CD33<sup>+</sup> myeloid-derived suppressor cells and their modulatory activity on the CD8<sup>+</sup> cytotoxic lymphocytes and monocytes in human lung cancer**  
Granted by National Science Council  
NMRPG376372, NSC 97-2314-B-182A-091-MY2
17. December 01, 2008 ~ November 30, 2009 (Co-PI)  
**Identification and growth of cancer stem cells in early stage non-small cell lung cancer and the clinical significance**  
PI: Dr. Ming-Ju Hsieh, Department of Thoracic Surgery, Chang-Gung Memorial Hospital  
Granted by Chang-Gung Memorial Hospital  
CMRPG371571
18. December 01, 2008 ~ November 30, 2009  
**Mechanisms of neutrophil apoptosis and neutrophil-derived  $\alpha$ -defensin-1-induced lung epithelial cell apoptosis: role of mitochondria and endoplasmic reticulum**  
Granted by Chang-Gung Memorial Hospital  
CMRPG 371651
19. August 01, 2009 ~ July 31, 2010 (Co-PI)  
**慢性阻塞性肺疾病病人自我管理衛生教育需求評估與介入措施成效之探討 (PI: 長庚大學陳綱華老師)**  
Granted by National Science Council  
NMRP NSC98-2511-S-182-005
20. September 01, 2009 ~ August 31, 2010 (1/2) (Co-PI)

**The effect of *Astragalus*-based formula, 清暑益氣湯 on modulating immune alterations in advanced stage, non-small cell lung cancer patients receiving 1<sup>st</sup> line doublet chemotherapy of cisplatin plus docetaxel and 2<sup>nd</sup> line erlotinib target therapy: the effect on myeloid-derived suppressor cells, CD4 (Th1 and Th2) cells, CD8 Tc cells, Treg cells, NK cells and monocytes**

PI: Dr. Tse-Hong Huang, Department of Chinese Medicine, Chang-Gung Memorial Hospital

Granted by Chang Gung Memorial Hospital

CMRPG28028

21. September 01, 2010 ~ August 31, 2011 (2/2) (Co-PI)

**The effect of *Astragalus*-based formula, 清暑益氣湯 on modulating immune alterations in advanced stage, non-small cell lung cancer patients receiving 1<sup>st</sup> line doublet chemotherapy of cisplatin plus docetaxel and 2<sup>nd</sup> line erlotinib target therapy: the effect on myeloid-derived suppressor cells, CD4 (Th1 and Th2) cells, CD8 Tc cells, Treg cells, NK cells and monocytes**

PI: Dr. Tse-Hong Huang, Department of Chinese Medicine, Chang-Gung Memorial Hospital

Granted by Chang Gung Memorial Hospital

CMRPG28028

22. May 01, 2011 ~ April 30, 2012

**Prognostic role of myeloid-derived suppressor cells, T-lymphocyte and monocyte subtypes in the disease outcome of stage I, II, III operable non-small cell lung cancer – A launch study.**

Granted by Chang-Gung Memorial Hospital

CMRPG 3A0371

23. August 01, 2011 ~ July 30, 2012

**Prognostic role of population alterations in myeloid-derived suppressor cells (MDSC), T-lymphocyte subpopulations and monocyte subtypes to the disease outcome of non-small cell lung cancer – Modulation of MDSC on T-lymphocytes and monocytes/macrophages (1st year)**

Granted by Chang-Gung Memorial Hospital

NMRPG 3A0141 NSC100-2314-B-182A-052